Math 120 (Washington)  Fall 2018  Sections 0311-0361

Lectures: ESJ 2208  TuTh 11:00 - 12:15

Lecturer: Larry Washington  Office: Math 4415  Phone: (301)405-5116  e-mail: lcw@math.umd.edu
Office hours: Monday 10:30am-11:30am and Thursday 12:40pm - 1:45pm
Course web page: http://math.umd.edu/~lcw/120.html. Course announcements will be on Elms.

Teaching Assistants:
**** Office: MTH0209  e-mail: ***@math.umd.edu
Sections **** Room: ESJ 1309; Section 0341: ESJ 2212
**** Office: MTH****  e-mail: ***@math.umd.edu
Sections **** Room: ESJ 1309; Section 0342: ESJ 2212

Description: An introduction to calculus for students in the social and management sciences, business, and architecture. Applications of calculus form an important part of the course.

Text: Every student is required to purchase a subscription to MyMathLab, which will include an electronic version of Calculus and its Applications, 14th ed., by Goldstein, Lay, Schneider, and Asmar. The online homework is done through MyMathLab. Most students find that the electronic version of the book suffices and they do not buy the much more expensive hard copy of the book. You should buy MyMathLab through the links on Canvas, NOT directly from the publisher.

Topics: (in Calculus and its Applications)

Chapter 1: Derivatives  3 lectures
Chapter 2: Applications of derivatives  5 lectures
Chapter 3: Techniques of differentiation  1 lecture
Chapter 4: Exponentials and logarithms  2 lectures
Chapter 5: Applications of exp. and log.  3 lectures
Chapter 6: Integration  3 lectures
Chapter 7: Functions of several variables  3 lectures

Exams: September 27, October 25, November 22.

Each student must bring her or his University picture ID card to the exams. Makeup exams will not be given unless a student can present substantial evidence that an absence was caused by serious illness, a death in the immediate family, religious observance, participation in University activities at the request of University authorities, or compelling circumstances beyond the student’s control. If the absence is caused by foreseeable circumstances, notice must be given in advance in order to be allowed to take a makeup exam. Students who do not provide adequate documentation for their absence will receive a score of zero for the exam. Each exam is worth 100 points and will last 75 minutes.

For more on University policies for absences and many other issues, see http://www.ugst.umd.edu/documents/CourseRelatedPolicies.pdf

Calculators are not allowed during exams and quizzes. Smart watches, etc., may not be worn during exams and quizzes.

Homework: Homework is on-line using MyMathLab. At the end of the term, the total homework score will be converted to a 50-point basis.

Quizzes: Most Discussion sections will have with a short 10-minute quiz. The questions on the quiz will be identical to MyMathLab questions, except possibly with different numbers. Plus each quiz will have one 2-point problem from the Algebra Review Sheet. The sections for the quiz are listed on the Course Schedule. Usually the sections are those covered in the current week’s lectures. At the end of the term, the lowest two quizzes will be dropped and the total quiz score for the remaining quizzes will be converted to a 100-point basis. The rules for makeup quizzes are the same as those listed above for exams.

Lecture Questions: During many lectures, there will be “clicker” questions (using the Turning Point software). Scores on these will be based more on participation than on correctness. Students should bring the appropriate electronic device (smart phone, laptop, tablet, etc.) to each lecture. At the end of the term, the total score for these activities will be converted to a 50-point basis. You do not need a clicker device. Your smart phone works. Instructions on registering the device will be given in class.

Recording Lectures: The classes in the lecture room (ESJ 2208) will be recorded and the recordings will be available on Elms.

Final Exam: Wednesday, December 12, 1:30-3:30pm. You must bring your University picture ID to the final. The final exam will last 2 hours.

Grading
Midterms: 100 points each
Quizzes: 100 points total
Lecture questions: 50 points total
Homework: 50 points total
Final exam: 200 points
The lowest one of the following will be subtracted from the total: 1/2 of the lowest midterm score, 1/2 the quiz total, the lecture questions, the homework, 1/4 of the final exam score.
The total possible score for the course is 650 points.
Grades will be assigned approximately as follows: A: 90% - 100%, B: 80% - 89%, C: 70% - 79%, D: 60% - 69%, F: ≤ 59%. Plus and Minus grades will be used.

Calculators: Calculators and smart phones and watches will not be allowed for quizzes and exams. They may be used for other in-class activities and for homework.

Schedule of book sections to be covered
(subject to adjustment if there are snow days, etc.)

<table>
<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Thursday</th>
<th>Friday Discussion</th>
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<tbody>
<tr>
<td>8/25 - 8/31</td>
<td>1.1, 1.2</td>
<td>1.3, 1.6</td>
<td>Discussion of 1.1 through 1.6</td>
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<tr>
<td>9/3 - 9/7</td>
<td>1.7, 1.8</td>
<td>2.1, 2.2</td>
<td>Quiz: 1.6, 1.7, 2.1, 2.2</td>
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<tr>
<td>9/10 - 9/14</td>
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<td>2.5</td>
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<tr>
<td>9/17 - 9/21</td>
<td>2.5</td>
<td>2.6</td>
<td>Quiz: 2.5, 2.6</td>
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<td>9/24 - 9/28</td>
<td>Review</td>
<td>Exam 1</td>
<td>Return Exam 1</td>
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<tr>
<td>10/1 - 10/5</td>
<td>3.1</td>
<td>4.1, 4.2, 4.3</td>
<td>Quiz: 3.1, 4.1, 4.2, 4.3</td>
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<tr>
<td>10/8 - 10/12</td>
<td>4.4, 4.5</td>
<td>5.1, 5.2</td>
<td>Quiz: 4.4, 4.5, 5.1, 5.2</td>
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<td>10/15 - 10/19</td>
<td>5.3</td>
<td>5.4</td>
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<td>6.3, 6.4</td>
<td>Quiz: 6.1, 6.2, 6.3</td>
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<tr>
<td>11/5 - 11/9</td>
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<td>Quiz: Prob., 7.2</td>
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<td>11/14 - 11/16</td>
<td>7.2</td>
<td>7.3</td>
<td>Quiz: 7.2, 7.3</td>
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<td>11/19 - 11/23</td>
<td>Review</td>
<td>Exam 3</td>
<td>Return Exam 3</td>
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<tr>
<td>11/26 - 11/30</td>
<td>Review</td>
<td>No Class</td>
<td>No Class</td>
</tr>
<tr>
<td>12/3 - 12/7</td>
<td>Review</td>
<td>Review</td>
<td>Review</td>
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FINAL EXAM: Wednesday, December 12, 1:30pm - 3:30pm

NOTES
There are 3 exams and a final, for a total of 4 exams.
The overall score from quizzes is the equivalent of one midterm. If you miss all of the quizzes, the highest average you can get (if you have perfect scores on everything else) is 92.3% = A−. Since you know the list of questions for each quiz (they are the MyMathLab problems due that morning), you should try to do well on the quizzes, since they can raise your average for the course.

If you skip all of the homework, miss all of the quizzes, and get perfect scores on all exams, you will have an overall average of 76.9% = C. Therefore, you should do the homework, the quizzes, and the clickers, since they are designed to raise your score.

Elms gives you an average for the course throughout the semester. This number is not accurate, so you should take it only as a rough estimate of how you are doing.

Here is an example of how grades are calculated, using the above description: Suppose your quiz average (after dropping the lowest two quizzes) is 85%, your midterms are 88, 52, and 79. Your Final is 150/200. Your Clicker score is 48/50, and your HW score is 47/50. Then your lowest score is the 52/100 on the second midterm, so it gets changed to 26/50 (it counts half). Your point total is

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\text{quizzes+exam+exam+exam+final+clickers+HW} = 85 + 88 + 26 + 79 + 150 + 48 + 47 = 523.
\]

This is out of 650 possible points, so the overall average is 530/650 = 81.5, which is a B−. If the second midterm had been recorded as 52/100 instead of 26/50, the overall average would have been 78.4, which is a C+.

8/20/2018